

AMENDMENTS TO THE CLAIMS

The listing of claims below replaces all prior versions and listings of claims. Only those claims being amended herein show their changes in highlighted form, where insertions appear as underlined text (e.g., insertions), while deletions appear as strikethrough text (e.g., ~~deletions~~) or enclosed in double brackets (e.g., [[deletion]]).

1. **(Currently Amended)** An apparatus for irrigating, supplying thermal energy to, and cleansing wounds, comprising:

a fluid flow path, comprising:

a conformable wound dressing, comprising a backing layer which is capable of forming a relatively fluid-tight seal or closure over a wound and a wound-facing face, at least one inlet pipe passing through and/or under the wound-facing face and directly or indirectly communicating with at least a fluid reservoir, and at least one outlet pipe passing through and/or under the wound-facing face, wherein a relatively fluid-tight seal or closure is formed over the wound at the point at which each inlet pipe and each outlet pipe passes through and/or under the wound-facing face;

a means for fluid cleansing in direct or indirect communication at least with the outlet pipe;

and

a fluid recirculation tube for directing cleansed fluid from the means for fluid cleansing back into the inlet pipe so that at least nutrients, molecules, factors, physiologically active components and/or other components from the wound dressing that aid in proliferation or that are favorable to the wound healing process are returned to the wound;

a device for moving fluid through at least the wound dressing and the ~~the~~ [[a]] means for fluid cleansing;

a means for supplying thermal energy to the fluid provided to the wound so as to maintain the wound at a temperature between 34 and 40 degrees Celsius to optimize the

metabolic activities of physiologically active components within the wound dressing and promote wound healing, and

a means for bleeding the fluid flow path to bleed fluid from the recirculation tube.

2. **(Currently Amended)** An apparatus according to claim 1, wherein the means for supplying thermal energy to the fluid provided to the wound comprises a heater and/or a conductively heated component of the apparatus flow path ~~in conductive contact with the irrigant and/or wound exudate.~~

3. **(Currently Amended)** An apparatus according to claim 1, wherein the means for supplying thermal energy to the fluid provided to the wound comprises a radiative heater ~~of the irrigant fluid and/or wound exudate.~~

4. **(Currently Amended)** An apparatus according to claim 1, wherein the means for supplying thermal energy to the fluid provided to the wound comprises a conductively heated component of the apparatus flow path ~~in conductive contact with the irrigant and/or wound exudate~~ and a radiative heater ~~of the irrigant fluid and/or wound exudate.~~

5. **(Currently Amended)** An apparatus according to claim 1, wherein the means for fluid cleansing is a single-phase system, in which ~~the~~ circulating fluid from the wound passes through the means for fluid cleansing and materials deleterious to wound healing are removed without the circulating fluid coming into direct or indirect contact with another fluid in the means for fluid cleansing.

6. **(Currently Amended)** An apparatus according to claim 1, wherein the means for fluid cleansing is a two-phase system, in which ~~the~~ circulating fluid from the wound passes through the means for fluid cleansing and materials deleterious to wound healing are removed by the circulating fluid coming into direct or indirect contact with another fluid in the means for fluid cleansing.

7. **(Currently Amended)** An apparatus according to claim 6 [[3]], wherein the circulating fluid from the wound and the other fluid in the means for fluid cleansing are separated by an integer which is selectively permeable to materials deleterious to wound healing.

8. **(Currently Amended)** An apparatus according to claim 6 [[3]], wherein the circulating fluid from the wound and the other fluid in the means for fluid cleansing are separated by an integer which is not selectively permeable to materials deleterious to wound healing, and

the other fluid comprises and/or is in contact with a material that removes materials deleterious to wound healing.

9. **(Canceled)**

10. **(Previously Presented)** A method of treating wounds to promote wound healing using the apparatus for aspirating, irrigating and/or cleansing wounds according to claim 1.

11. **(Currently Amended)** An apparatus according to claim 1, wherein the means for supplying thermal energy comprises a heater configured to supply thermal energy to the fluid in the fluid reservoir.

12. **(Currently Amended)** An apparatus according to claim 1, wherein the means for supplying thermal energy comprises a heater configured to supply thermal energy to the fluid in the at least one inlet pipe.

13. **(Currently Amended)** An apparatus according to claim 1, wherein the apparatus is configured such that at least a portion of the fluid flowing through the outlet pipe is directed to a waste reservoir.

14. **(Currently Amended)** A method of treating a wound, comprising the steps of:
providing a conformable wound dressing having a cover configured to form a relatively fluid-tight seal around at least a portion of a wound;

providing an apparatus for irrigating and/or cleansing a wound comprising:

at least one inlet pipe configured to communicate with the cover dressing and configured to provide a fluid conduit so that fluid can flow into the cover dressing;

at least one outlet pipe configured to communicate with the cover dressing and configured to provide a fluid conduit so that fluid can flow out of the cover dressing, wherein the fluid in the cover wound dressing comprises physiologically active components;

pumping fluid through at least the inlet pipe, the cover wound dressing, and the outlet pipe;

cleansing the fluid that flows out of the cover wound dressing;

regulating the fluid that flows out of the cover wound dressing so that a portion of the fluid that flows out of the cover wound dressing comprising physiologically active

components is recirculated back to the cover dressing after being cleansed and a portion of the fluid that flows out of the cover wound dressing is bled through a bleed mechanism and is provided to a waste reservoir; and

heating the fluid before the fluid enters the cover dressing to maintain the wound at an approximately normothermic range to optimize the metabolic activities of the physiologically active components within the cover wound dressing and promote wound healing.

15. **(Previously Presented)** The method of Claim 14, wherein the normothermic range is from approximately 34 and 40 degrees Celsius.

16. **(Currently Amended)** The method of Claim 14, wherein ~~the step of~~ heating the fluid before the fluid enters the cover dressing to maintain the wound at an approximately normothermic range comprises heating the fluid in the fluid reservoir to a temperature approximately within the normothermic range.

17. **(Currently Amended)** The method of Claim 14, wherein ~~the step of~~ heating the fluid before the fluid enters the cover dressing to maintain the wound at an approximately normothermic range comprises heating the fluid in the fluid reservoir to a temperature slightly above the normothermic range.

18. **(Currently Amended)** The method of Claim 14, further comprising ~~the step of~~ adjusting the proportion of the amount of fluid that is provided to the cover dressing after being cleansed and the amount of fluid provided to the cover dressing from the fluid reservoir.

19. **(Currently Amended)** An apparatus for irrigating, supplying thermal energy to, and cleansing wounds, comprising:

a wound dressing comprising a backing layer configured to form a relatively fluid-tight seal around at least a portion of a wound;

at least one inlet pipe configured to communicate with the backing layer dressing and to provide a fluid conduit into the backing layer dressing;

at least one outlet pipe configured to communicate with the backing layer dressing and to provide a fluid conduit out of the backing layer dressing;

a fluid reservoir comprising irrigation fluid in fluid communication with the inlet pipe to supply irrigation fluid from the fluid reservoir into the backing layer dressing;

a fluid pump configured to pump fluid through at least the inlet pipe, the backing layer wound dressing, and the outlet pipe;

a fluid cleansing mechanism in fluid communication with the outlet pipe;

a recirculation tube in fluid communication with the fluid cleansing mechanism configured to recirculate fluid cleansed by the fluid cleansing mechanism back into the inlet pipe, the fluid recirculation tube having a bleed valve to bleed fluid from the recirculation tube, the recirculated fluid comprising physiologically active components; and

a heat source configured to heat the fluid before the fluid enters the backing layer dressing, the heat source configured so that the fluid maintains the wound at an approximately normothermic range to optimize the metabolic activities of physiologically active components within the backing layer wound dressing and promote wound healing.

20. **(Previously Presented)** An apparatus according to claim 19, wherein the thermal energy provided to the wound maintains the wound between approximately 34 and 40 degrees Celsius.

21. **(Canceled)**

22. **(Currently Amended)** An apparatus according to claim 19, wherein the heat source ~~means for supplying thermal energy to the fluid provided to the wound~~ comprises a radiative heater of the irrigant fluid and/or wound exudate.

23. **(Canceled).**

24. **(New)** An apparatus according to claim 1, wherein the means for supplying thermal energy to the fluid provided to the wound is supported by the backing layer.

25. **(New)** An apparatus according to claim 1, wherein the means for supplying thermal energy to the fluid provided to the wound is configured to surround at least a portion of at least one inlet pipe.

26. **(New)** The method of Claim 14, comprising heating the fluid before the fluid enters the cover with a heat source supported by the cover.

27. **(New)** The method of Claim 14, comprising heating the fluid before the fluid enters the cover with a heat source surrounding at least a portion of the at least one inlet pipe.

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28. (New) An apparatus according to claim 19, wherein the heat source is supported by the backing layer.

29. (New) An apparatus according to claim 19, wherein the heat source is configured to surround at least a portion of the inlet pipe.